

March 23, 2015

Presented by:
Minuteman School Building
Committee



Minuteman High School Building Project

Presentation for the Town of Needham

A REVOLUTION IN LEARNING

Agenda

- Who We Are
- Why We Need to Act
- What We've Already Done
- A Look at Our Options
- What's It Going to Cost You?
- Why Act Now?
- Which Option Do You Prefer?



Who We Are

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Minuteman High School

- Your Public High School for Students Who Want to Actively ***Experience*** Their Learning
- We Offer Rigorous Academic Courses, including Advanced Placement (AP) courses
- We Offer Industry-Supported Career and Technical Education in 19 Career Majors
- In Many of Our Programs, Students Earn State or Professional Certifications
- We Offer Sports and Art and Drama

Minuteman High School

- Our Students Pass the MCAS Exam, Just Like Students in Traditional Academic High Schools
- 65% of Our Graduates Go to College and 33% Begin Careers
- We Have 16 Member Towns
- We Opened in 1972



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Why We Need to Act

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Why We Need to Act Video



Why We Need to Act

1. Current Building Conditions Demand It
2. We Can Enhance Our Educational Program by Improving Our Outdated Physical Plant
3. Our NEASC Accreditation is in Jeopardy

1. Current Building Conditions

- Structural, design, code, and construction problems have been cited in multiple engineering reports.
- There are problems with the roof, exterior shell, electrical systems, plumbing systems, ventilation, egress, and parking lots.
- The building does not meet today's fire and building codes and ADA/handicap accessibility requirements.

1. Current Building Conditions

- Roughly \$100 million is needed over an extended period of time just to keep the building operational
- When major repairs reach a “tipping point,” they would automatically trigger the need to bring the entire building into compliance with building codes, fire safety codes, and handicap accessibility laws.

Site Issues



Exterior Shell Issues



Roof Issues

- The roof has been a problem for many years and has been patched on multiple occasions.
- The roof was replaced almost 30 years ago.



Roof Issues



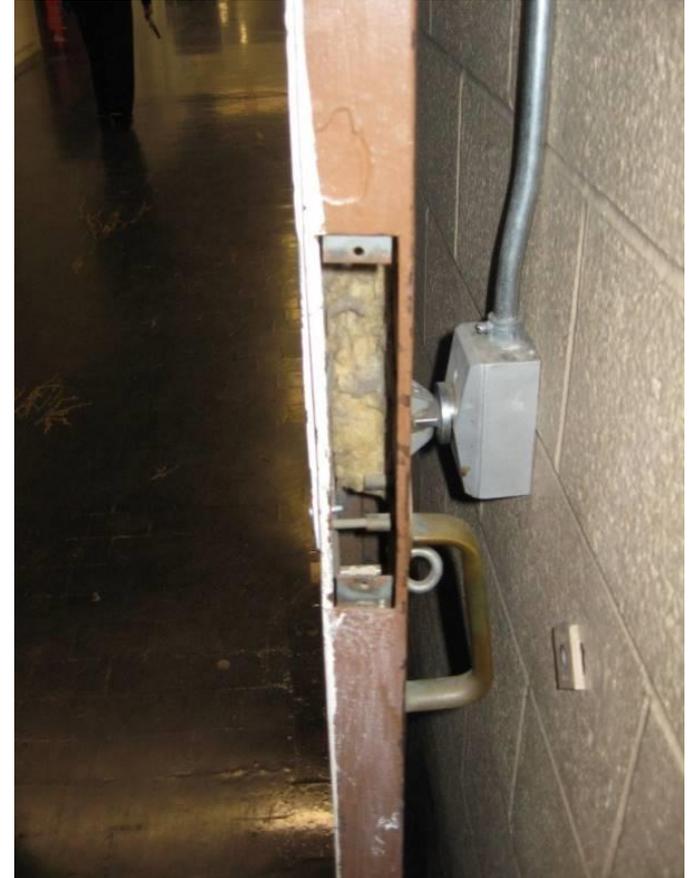
The roof continues to deteriorate.



Accessibility Issues



Egress Issues



Mechanical, Electrical and Plumbing Issues



Enhancing Education Video



2. Enhancing Our Educational Program

- The School Committee has endorsed creation of a Career Academy Model to support the delivery of high-quality Career and Technical Education.
- Career Academies improve student performance by creating **synergy** – closely **connecting** and **integrating** career education with rigorous academics.

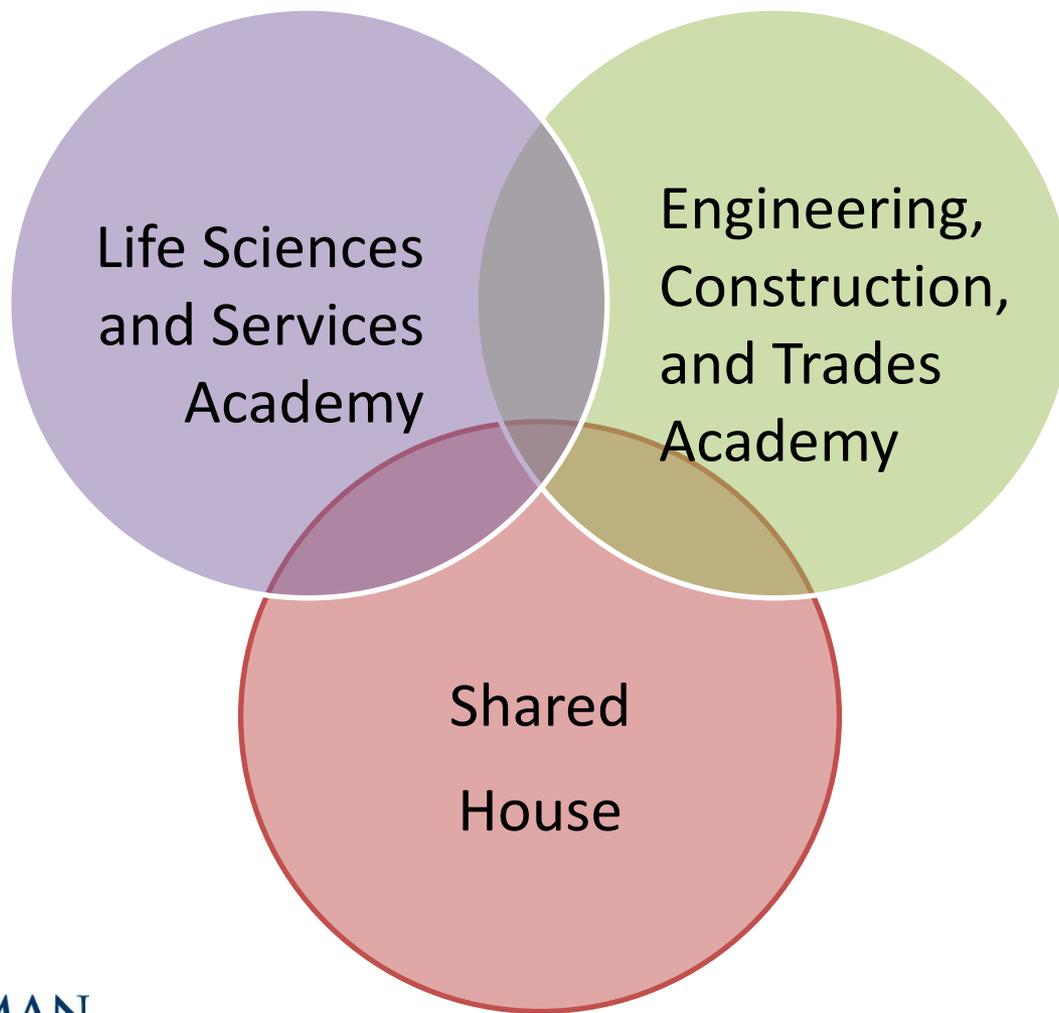
Enhancing Our Educational Program

- The current school was designed in the late 1960s and built in the 1970s in the “open classroom” design.
- That design was fashionable at the time. It is a well documented failure.
- The building was not designed or configured for our current programming.
- The mechanical and electrical infrastructure does not support our current technology needs.

Enhancing Our Educational Program

- The school was designed to **separate** academic disciplines from one another – and to **isolate** career/technical programs from academic programs.
- It was not designed to accommodate a Career Academy Model which **promotes** collaboration and communication.
- Simply put, the building was not designed to deliver a 21st Century education.

Enhancing Our Educational Program: The Career Academy Model



Engineering, Construction, & Trades Academy	Life Sciences & Services Academy	Shared House	
Electrical	Culinary Arts & Hospitality	Advanced Placement	Health & Safety
Advanced Manufacturing	Cosmetology & Barbering	Nursing Services	Entrepreneurship
Carpentry	Early Education & Care	Media Center	Financial Literacy
Automotive	Health Occupations	Special Education	Digital Literacy
Plumbing	Environmental Science	Physical Education	Reading Consultancy
Design & Visual Communications	Biotechnology	Humanities	Foreign Languages
Programming & Web Development	Horticulture	Guidance	Executive Function
Robotics Engineering Automation		Math	Co-Op
Multi-Media Engineering		Science	Project Based Learning
		English	Common Planning Time

3. Accreditation

- The New England Association of Schools & Colleges (NEASC) cited multiple deficiencies in the facility.
- December 2012: NEASC placed Minuteman on “Warning” status **solely** due to condition of the building.
- NEASC requires regular updates on our progress in addressing this one issue.



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What We've Already Done

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The Massachusetts School Building Authority (MSBA) Process

- 2009: Launched MSBA Feasibility Study
- Formed a School Building Committee
- Hired Consultants
 - Owner's Project Manager Skanska
 - Architect Kaestle Boos Associates
 - Estimator Daedalus
- 2014: Granted Final Extension by MSBA to June 30, 2016
- 2015: Released Preliminary Cost Estimates

Actions We've Taken

The District:

- Adopted a New Educational Program Plan
- Established Building Design Enrollment of 628 Students
- Resolved to Increase Member Town Enrollment
- Thoroughly Researched All Building Options
- Locked-In a **40%** MSBA Base Reimbursement Rate
- Developed a “Plan B” in the Event Any One of Our 16 Towns Fails to Approve a Project and the MSBA Withdraws



A Look at Our Options

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First, the State-Funded Options

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Option #1 - Renovation

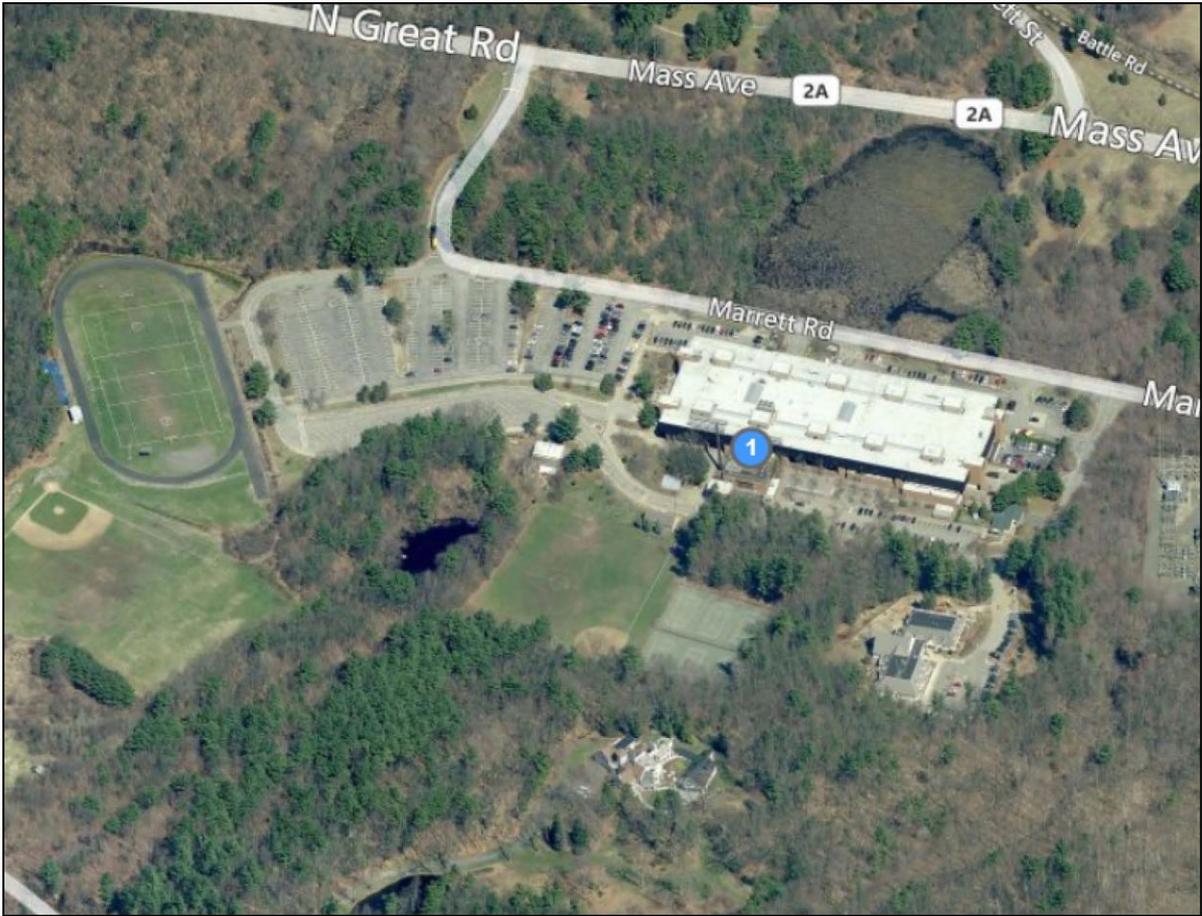
Benefits

- 40% State Funding
- Retain Heating and Cooling Systems
- Career Academy Model is Partially Achieved

Limitations

- Work Done While School is Occupied
- Phasing Will Cause Class Disruptions and Student Inconvenience
- Constrained by the Existing Building Footprint

Option #1 - Renovation



Option #2 - Renovation/Addition

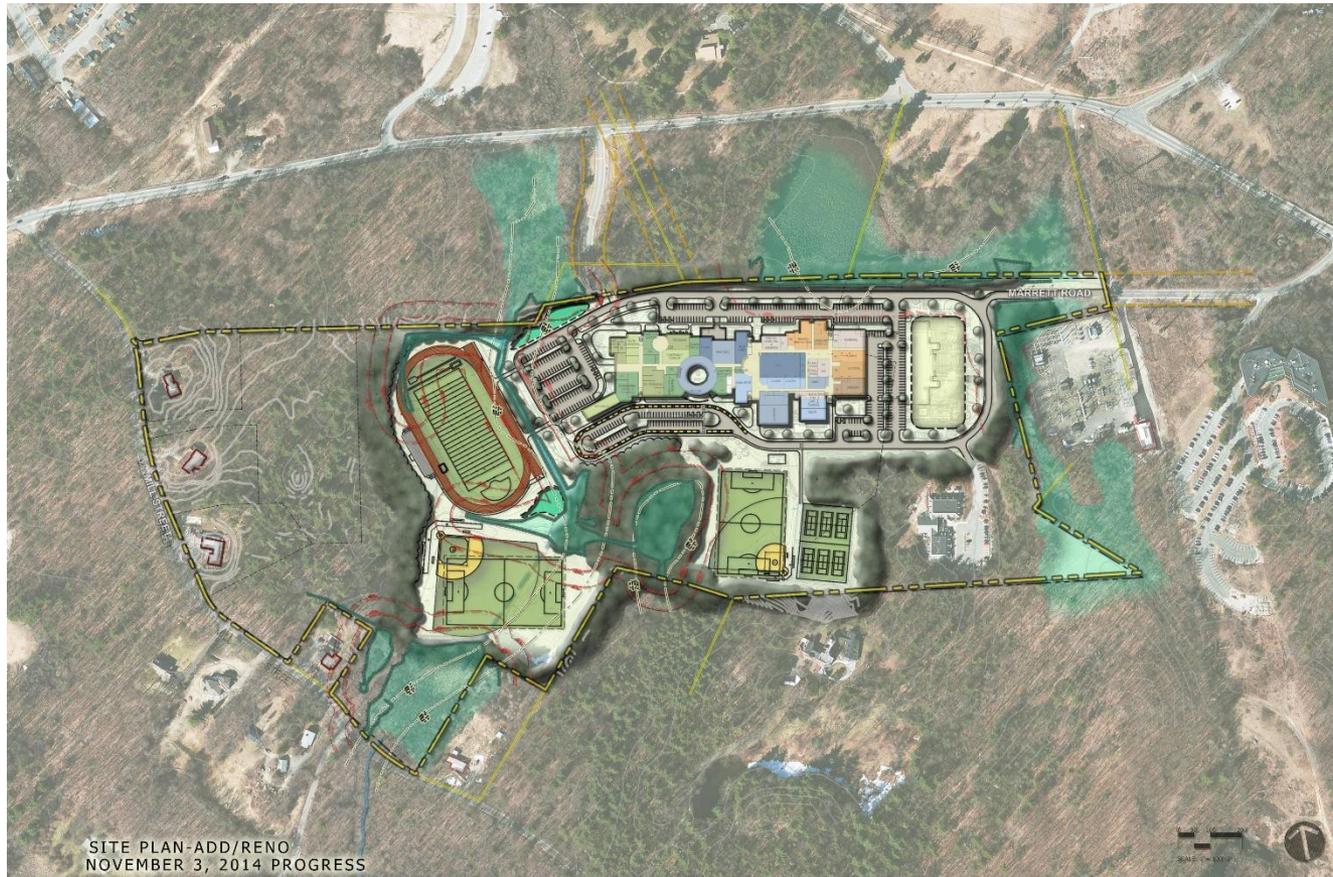
Benefits

- 40% State Funding
- Structural Improvements
- Career Academy Model is Fully Achieved

Limitations

- Additional Cost for Demolition

Option #2 - Renovation/Addition



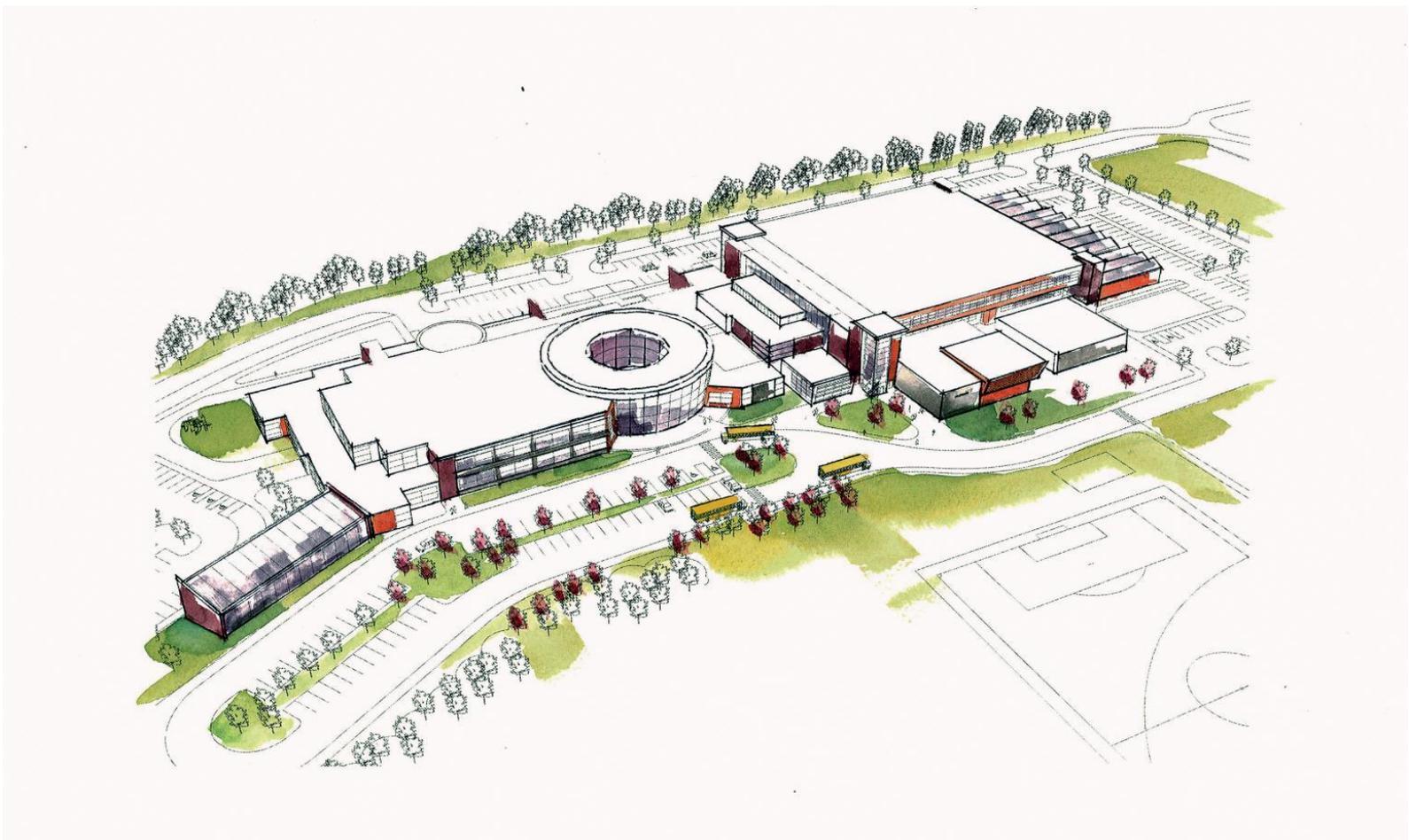
SITE PLAN-ADD/RENO
NOVEMBER 3, 2014 PROGRESS



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K/ESTLE BOOS
ASSOCIATES, INC. **SKANSKA**

Option #2 - Renovation/Addition



Option #3 - New School

Benefits

- 40% State Funding
- Major Structural and Educational Improvements
- Career Academy Model is Fully Achieved
- Minimal Class Disruption

Limitations

- Additional Cost for Demolition of Existing School

Option #3 - New School



Option #3 - New School





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Plan B – The Self-Funded, Non-MSBA Options

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Option #4 - Repairs With Educational Improvements

Benefits

- Critical Repairs Addressed
- May Support a Career Academy Model

Limitations

- Not Reimbursable by the MSBA
- Work Done When the School is Occupied
- Disruptive to Students
- Extended Project Duration
- Uncertain Funding
- Uncertain Cost Escalation
- Major Repairs Trigger Code Compliance

Option #5 - Repairs Only

Benefits

- Lowest Total Construction Cost (But Not Lowest Cost to the District)
- Critical Repairs Addressed

Limitations

- Not Reimbursable by MSBA
- No Educational Program Improvements
- Work Done When the School is Occupied
- Disruptive to Students
- Extended Project Duration
- Uncertain Funding
- Uncertain Cost Escalation
- Major Repairs Trigger Code Compliance

Preliminary Cost Estimates

	Total Cost	District Share	Project Duration
Option #1 – Renovation	\$176.5 million	\$105.9 million	5 years
Option #2 – Renovation/Addition	\$175.3 million	\$105.2 million	4 years
Option #3 – New School with Demolition of Existing Building	\$144.9 million	\$86.9 million	2.75 years
Option #4 – Repairs Only with Some Structural Changes for Educational Program Improvements	*\$198.4 million	*\$198.4 million	10 years
Option #5 – Repairs Only with No Educational Program Improvements	*\$100.4 million	*\$100.4 million	10 years

* These estimates have been adjusted by the School Building Committee to include expected engineering, design, bidding, and project oversight costs. They do not include likely cost escalation due to extended project duration.

What's It Going to Cost You?

Current Agreement

	Total Cost to the District Towns	Projected Annual Cost to the Town of Needham	Projected Annual Cost to a Median Homeowner in Needham
Option #1 – Renovation	\$105.9 million	\$273,097	\$12.09
Option #2 – Renovation/Addition	\$105.2 million	\$271,261	\$12.01
Option #3 – New School with Demolition of Existing Building	\$86.9 million	\$224,072	\$9.92

Assumptions: Existing Regional Agreement Capital Cost Allocation formula with a 30-year bond, 628 student enrollment, 8% annual enrollment increase.

What's It Going to Cost You?

Revised Agreement

	Total Cost to the District Towns	Projected Annual Cost to the Town of Needham	Projected Annual Cost to a Median Homeowner in Needham
Option #1 – Renovation	\$105.9 million	\$293,815	\$16.33
Option #2 – Renovation/Addition	\$105.2 million	\$291,839	\$16.23
Option #3 – New School with Demolition of Existing Building	\$86.9 million	\$241,071	\$13.40

Assumptions: Revised Regional Agreement Capital Cost Allocation formula with a 30-year bond, 628 student enrollment, 8% annual enrollment increase.

Can We Do Nothing?

- No. There isn't a **“do nothing”** option.
- Critical repairs must be done and changes must be made to ensure a safe building for our students, to provide them the best education possible, and to maintain our accreditation.

Next Steps

- April 2015: School Building Committee Completes Collection of Comments from Town Officials and Citizens
- May 2015: School Committee Votes on Preferred Option to Recommend to MSBA
- July 2015: MSBA Selects Preferred Option
- Schematic Design Developed
- Spring 2016: Town Meeting Votes
- 2016-2017 Construction Documents Prepared
- 2018: Construction Begins

Summary: Why We Need to Act

- 1. We Need to Address Building Maintenance Problems and Safety Issues**
- 2. We Need to Create a Working School Environment Designed for the Future**
- 3. We Need to Address Accreditation Issues**

Why Act Now?

- We Have a Limited Window to Preserve **40%** MSBA Funding.
- We have **one** shot: until June 30, 2016.
- If we get out of the MSBA project pipeline, we might not get back in.
- Even if we do get back in, our base reimbursement rate would fall to **31%**.

Your Feedback

- Do you have any questions, comments, or recommendations?
- Which **Option** do you support and recommend as the **Preferred Option**?
- Why do you support it?

Why Your Input Is So Important

- We want to pursue a project that makes sense for the Minuteman district.
- We want a project that all 16 district towns can rally around.
- When we go to Town Meetings, we need all 16 to say “yes.”

Let Us Know What You Think

- Fill Out the Form We Are Providing Today
- Complete a Quick Electronic Survey:
 - <https://www.surveymonkey.com/s/project758>
- E-Mail Us:
 - SchoolBuildingCommittee@minuteman.org

For More Information

- Website for the Minuteman School Building Committee:

www.minutemanschoolbuilding.org